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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,069	12/20/2001	Arunkumar B. Thippeswamy	CISCP740	2860
54406	7590	09/26/2007		
AKA CHAN LLP / CISCO 900 LAFAYETTE STREET SUITE 710 SANTA CLARA, CA 95050			EXAMINER SAM, PHIRIN	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/028,069

Applicant(s)

THIPPESWAMY ET AL.

Examiner

Phirin Sam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 17-21 and 27-31 is/are allowed.
- 6) ☒ Claim(s) 11, 12, 14-16, 22, 23, 25, 26 and 32-36 is/are rejected.
- 7) ☒ Claim(s) 13 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



PHIRIN SAM  
PRIMARY EXAMINER

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 11, 12, 14, 22, 23, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,636,482 (hereinafter referred as “Cloonan”).

**Regarding claims 11, 12, and 14,** Cloonan discloses a method for forwarding packets associated with a session upstream from a subscriber unit to a central access point (see Fig. 2, col. 4, lines 35-44), the method comprising:

- (a) identifying a number (N) of available service flows between the subscriber unit and the central access point (see Fig. 2, col. 7, lines 23-61);
- (b) sending a first packet from the subscriber unit to the central access point on a first service flow included in the N available service flows (see Fig. 2, col. 4, lines 35-44);
- (c) sending an Nth packet from the subscriber unit to the central access point on an Nth service flow included in the N available service flows (see Figs. 2 and 3, col. 4, lines 35-60).

**Regarding claims 22, 23, and 26,** Cloonan discloses a device for forwarding packets associated with a session upstream to a central access point, the device comprising:

- (a) means for causing a number (N) of available service flows to the central access point to be identified (see Fig. 2, col. 7, lines 23-61);

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- (b) means for causing a first packet to be sent to the central access point on a first service flow included in the N available service flows (see Fig. 2, col. 4, lines 35-44);
- (c) means for causing an Nth packet to be sent to the central access point on an Nth service flow included in the N available service flows (see Figs. 2 and 3, col. 4, lines 35-60).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 15, 16, 25, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,636,482 (hereinafter referred as "Cloonan") in view of US Patent 6,889,385 (hereinafter referred as "Rakib").

**Regarding claims 15, 16, and 25,** Cloonan does not disclose DOCSIS. However, Rakib discloses DOCSIS (see Fig. 2, col. 32, lines 29-61). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine DOCSIS teaching by Rakib with Cloonan. The motivation for doing so would have been to provide to permit the addition of high-

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speed data transfer to an existing cable TV system. Therefore, it would have been obvious to combine Rakib and Cloonan to obtain the invention as specified in the claims 15, 16, and 25.

**Regarding claims 32-36**, Cloonan discloses a device for forwarding packets to a central access point, the device comprising:

- (a) a receiving component, the receiving component being arranged to receive a plurality of packets that are to be forwarded to a central access point (see Fig. 2, col. 5, lines 11-34);
- (b) a plurality of service flow identifiers which are associated with a plurality of service flows (see Fig. 2, col. 5, lines 53-67, and col. 6, lines 1-12);
- (c) a routing component, the routing component being arranged to receive the plurality of packets from the receiving component (see Fig. 2, col. 5, lines 11-34); the routing component further being arranged to provide a plurality of packets to the plurality of service flow identifiers (see Figs. 2 and 3, col. 7, lines 23-67, and col. 8, lines 1-38);

Cloonan does not disclose round robin. However, Rakib disclose round robin (see Fig. 7a, col. 45, lines 51-67, and col. 46, lines 1-10). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine round robin teaching by Rakib with Cloonan. The motivation for doing so would have been to provide to prevent the congestion in the network. Therefore, it would have been obvious to combine Rakib and Cloonan to obtain the invention as specified in the claims 32-36.

***Allowable Subject Matter***

6. Claims 1-10, 17-21, and 27-31 are allowed.

7. Claims 13 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

8. Applicant's arguments with respect to claims 22, 23, 25, and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: September 19, 2007



**PHIRIN SAM  
PRIMARY EXAMINER**